

**REMARKS**

The Applicants do not believe that entry of the foregoing response will result in the introduction of new matter into the present application for invention. Therefore, the Applicants, respectfully, requests that the above response be, kindly, reconsidered.

The Final Office Action dated October 7, 2003 has been received and considered by the Applicants. Claims 1-20 are pending in the present application for invention. Claims 1-20 stand rejected by the October 7, 2003 Office Action.

The Final Office Action rejects Claims 1-7, 10-15 and 18-20 under the provisions of 35 U.S.C. §102(b), as being anticipated by Chapman (IEEE Transaction on Magnetics, V. 25, No. 5, pp. 3686-3688, 1989) (hereinafter referred to as Chapman). The Examiner states that Chapman discloses the claimed elements including a magnetic coil formed at the first side of a first substrate. The Examiner has indicated that Figs. 1a-1d of Chapman disclose this feature recited by the rejected claims. The Applicants, respectfully, disagree with this assertion contained within the Office Action. There is no magnetic coil formed on an edge of a substrate within the four corners of Chapman. The only coil disclosed within Chapman is illustrated in Figure 7 and is not formed at an edge of any substrate.

The Examiner states in the Response to Arguments on page 5 of the Final Office Action that the feature of the magnetic coil formed on an edge of a substrate is not recited by the rejected claims. The Applicants would like to draw the Examiner's attention to the last element of rejected Claim 13 the recites "removing material from a second side of the first substrate, wherein the second side is turned away from the first side, until features of the slider and the magnetic coil are exposed thereby forming a face." The Applicants respectfully assert that the magnetic coil being formed on an edge of a substrate is clearly recited by the rejected claims. Initially, the magnetic coil is formed at a first side of a first substrate, thereby being formed at an edge of a substrate. Then, after placing a second substrate to the first side of the first substrate, the second side of the first substrate is etched away exposing the magnetic coil. Accordingly, the Applicants, respectfully, disagree with the assertions made in the Final Office Action.

The Examiner additionally states that the feature of the magnetic coil formed at an edge of a substrate are not found in the disclosure or the drawings. The Applicants, respectfully,

that show magnetic coil 7 formed at the edge of a substrate. Additionally, the Applicants, respectfully, draw the Examiner's attention to the description contained within the specification to the present invention, specifically, the description beginning on page 6, line 20. The magnetic coil that is formed at an edge of a substrate is discussed throughout the disclosure of the invention. Accordingly, this rejection is respectfully, traversed.

The Final Office Action rejects Claims 8 and 16 under the provisions of 35 U.S.C. §103(a) as being unpatentable over Chapman in view of U.S. Patent No. 6,452,742 issued to Crue et al. (hereinafter referred to as Crue et al.). The Examiner states that Crue et al. teaches a magnetic head and discloses an alumina layer is a heat sink layer. The Applicants would like to, respectfully point out that rejected Claims 8 and 16 recite that the heat sink is formed next to the magnetic coil during the formation of the magnetic coil. The recited magnetic coil, as previously stated, is formed at the surface of the first substrate. Crue et al. clearly illustrates that coil 140 as disclosed therein is not at the surface. Neither Chapman nor Crue et al. disclose the formation of a coil at the surface as recited by rejected Claims 8 or 16. Accordingly, this rejection is respectfully, traversed.

The Final Office Action rejects Claims 9 and 17 under the provisions of 35 U.S.C. §103(a) as being unpatentable over Chapman in view of U.S. Patent No. 5,978,319 issued to Wang, et al. (hereinafter referred to as Wang et al.). The Examiner states that Chapman describes the claimed method but does not show the structure of the coil and that Wang et al. discloses the structure of the coil. The Applicants, respectfully, disagree with this assertion contained in the Office Action. The teachings of Wang et al. relate to a coil assembly 12 that is mounted onto a slider 14. The present invention as recited by rejected Claims 9 and 17 recite a slider that is formed with a coil. The Applicants would like to, respectfully point out that Wang et al. is illustrative of the prior art problem that is solved by the present invention (e.g. see page 2, lines 21-25 of the specification to the present invention, wherein the problems associated with forming a "ditch" to place the coil in are discussed). The recited magnetic coil, as previously stated, is formed at the surface of the first substrate. Wang et al. clearly describes the independent formation of a coil to be placed on the slider afterwards and does not pertain to the formation of a slider with the coil formed on the slider. Neither Chapman nor Wang et al. disclose the formation of a coil at the air bearing surface as recited by rejected Claims 9 and 17. Accordingly, this rejection is respectfully, traversed.

Applicant is not aware of any additional patents, publications, or other information not previously submitted to the Patent and Trademark Office which would be required under 37 C.F.R. 1.99.

In view of the foregoing remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.

Respectfully submitted,

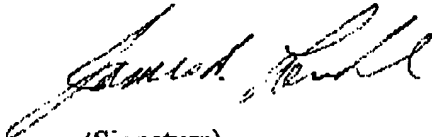
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